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(54) High-frequency, high-leakage-reactance transformer.

(57) A high-frequency, high-leakage-reactance transformer has a section of low-permeability magnetic material disposed between planar primary and secondary windings. The low-permeability section provides a controlled flux path for the leakage flux between the primary and secondary windings. Excessive eddy currents are thus prevented from flowing in the planar windings, and high-efficiency operation is achieved. The high-leakage-reactance transformer can function both as a transformer and an inductor, thereby reducing the size of, for example, a resonant power supply or a discharge lamp ballast.

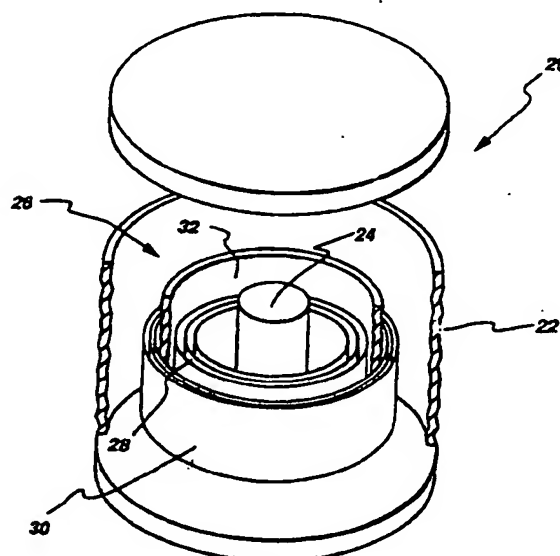


Fig. 3

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EUROPEAN SEARCH REPORT

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| DOCUMENTS CONSIDERED TO BE RELEVANT | | | |
|--|---|--|---|
| Category | Citation of document with indication, where appropriate, of relevant passages | Relevant to claim | CLASSIFICATION OF THE APPLICATION (Int. CL.5) |
| X | US-A-4 613 841 (ROBERTS) * column 7, line 13 - line 21; figures 7A-8B * | 1,2 | H01F27/34 H01F27/38 |
| A | --- | 4 | |
| D,A | US-A-4 943 793 (NGO ET AL) * column 4, line 19 - line 23 * * column 5, line 19 - line 48 * * column 6, line 5 - line 22; figures 4,8 * | 1-4,6-8 | |
| | | | TECHNICAL FIELDS SEARCHED (Int. CL.5) |
| | | | H01F |
| The present search report has been drawn up for all claims | | | |
| Place of search THE HAGUE | | Date of completion of the search 10 DECEMBER 1992 | Examiner MARTI ALMEDA R. |
| <p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons</p> <p>& : member of the same patent family, corresponding document</p> | | | |

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